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APPLICATION NO.	NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/706,227 11/03/2000		Erling H. Wold	AMC-00-003	6504		
28661	7590	06/23/2006		EXAMINER		
		ROUP, LTD.	OPSASNICK, MICHAEL N			
1657 Hwy 39: Minden, NV		02		ART UNIT	PAPER NUMBER	
				2626	2626	

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)					
Office Action Summary			27	WOLD ET AL.					
				Art Unit					
		Michael N	. Opsasnick	2626					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHI THE I - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNIC. Insions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) a period for reply is specified above, the maximum stature to reply within the set or extended period for reply with eply received by the Office later than three months after adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no evication. 1ays, a reply within the stat ory period will apply and w 1. by statute. cause the app	ent, however, may a reply be tim utory minimum of thirty (30) day: ill expire SIX (6) MONTHS from lication to become ABANDONE!	nely filed s will be considered time the mailing date of this of 0 (35 U.S.C. § 133).	ely. communication.				
Status									
1)⊠	Responsive to communication(s) filed	on 16 June 2006.							
•	·)⊠ This action is n	on-final.						
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
5)□ 6)⊠ 7)□	 Claim(s) 45-60 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. □ Claim(s) is/are allowed. □ Claim(s) 45-60 is/are rejected. □ Claim(s) is/are objected to. □ Claim(s) are subject to restriction and/or election requirement. 								
Applicati	on Papers								
10)	The specification is objected to by the The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the total or declaration is objected to be	a) accepted or b) on to the drawing(s) be ne correction is require	ne held in abeyance. See ned if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 C					
Priority ι	ınder 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
2) Notice 3) Information	t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO-1449 or P		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	[·] O-152)				

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/2006 has been entered.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 45-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Schulze</u> (4918730) in view of <u>Blum et al (5918223)</u> in further view of <u>Savic et al (5327521)</u>.

As per claims 45,47,48, <u>Schulze (4918730)</u> teaches a method (col. 9 lines 45-55), apparatus (figs. 1-4), and storage medium (col. 4 lines 15-27 -- RAM for storing

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processing results, and other storage mediums) for creating a signature of sampled work (examiner notes that the claim scope of 'sampled work' is an audio signal, applicant's specification, page 1, and page 3 line 20 – page 4 line 2) in real time comprising receiving a sampled work (as digitizing the audio signal -- col. 4 lines 10-15, 25-34)

"segmenting said sampled work......segments....hop sizes" as storing time segments of the envelope signal (abstract), wherein the segment is preferably 1.7 seconds and the envelope size has a predetermined range (hop, size, col. 2 lines 42-47)

"creating a plurality of signatures.....segments.....includes calculations of a plurality of acoustic features.....coefficients" as generating envelop signatures (col. 1 lines 48-55; and a further correlation function → col. 9 lines 28-45)

"storing said sampled work signature" as storing the envelope signature (abstract)

Schulze (4918730) does not explicitly teach the use of a reference database storing representative signatures for each of a plurality of known works (Schulze (4918730) teaches storing the current envelope signature – abstract), however, Blum et al (5918223) teaches the use of such database to store signatures (Blum et al (5918223), abstract). Therefore, it would have been obvious to one of ordinary skill in the art of audio signature comparison to expand the memory structure of Schulze (4918730) into an accessible database because it would advantageously allow for the storage of multiple audio signatures, therefore improving upon the number of audio signatures that can be recognized (Blum et al (5918223), col. 1 lines 44-52).

The combination of <u>Schulze (4918730)</u> in view of <u>Blum et al (5918223)</u> does not explicitly teach the hop size (i.e. overlap), however, <u>Savic et al (5327521)</u> teaches the use of

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analyzing overlapping segments for speech/audio data (col. 4 lines 36-43). Therefore, it would have been obvious to one of ordinary skill in the art of speech/audio signal processing to modify the processing technique as taught by Schulze (4918730) in view of Blum et al (5918223) with overlapped signal processing because it would advantageously produce a smooth spectrum (col. 4 lines 63-65), as well as customizing time resolution capability (Savic et al (5327521), col. 7 lines 3-15).

As per claims 46, <u>Schulze (4918730)</u> teaches calculating envelop features for each segment (col. 7 lines 50-65).

As per claim 49, <u>Schulze (4918730)</u> teaches a plurality of segments and an identification portion (abstract).

As per claim 50, <u>Schulze (4918730)</u> teaches a segment size of 1.7 seconds (col. 1 lines 52-58).

As per claim 51, <u>Schulze (4918730)</u> teaches the hop size to be less than 50% of the segment size (<u>Schulze (4918730)</u> teaches a range of 2 Hz to 50 Hz, which is less than 1/1.7 seconds; col. 2 lines 1-2).

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As per claim 52, <u>Schulze (4918730)</u> teaches a hop size of around .1 seconds (a .1 second hop size corresponds to 10 Hz, which falls in the range of 2-50 Hz, as taught <u>Schulze (4918730)</u>, col. 2 lines 1-2).

Claims 53 - 60 are apparatus claims that incorporate the claimed method steps of claims 45-52 and are therefore similar in scope as claims 45-52; therefore, claims 53-60 are rejected under similar rational as presented above in the rejection of claims 45-52.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Examiner notes the introduction of the Savic reference to address the arguments presented against the overlap feature of the claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno 6/21/06

Michael N. Opsasnick

Examiner Art Unit 2626